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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,700

03/25/2004

Norihiko Hareyama

17553

5916

23389

7590

04/09/2008

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EXAMINER

LAMPRECHT, JOEL

ART UNIT

PAPER NUMBER

3737

MAIL DATE

DELIVERY MODE

04/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/808,700	Applicant(s) HAREYAMA, NORIHIKO	
	Examiner JOEL M. LAMPRECHT	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/25/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because it is over 150 words.

Correction is required. See MPEP § 608.01(b).

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the patient" in line 3. There is insufficient antecedent basis for this limitation in the claim. Additionally, in claim 1 paragraph 5 (a treatment power supply unit...) the phrase after the word "switch" is excessively confusing. Examiner has examined the claim as if it were the same language as used in claim 6 paragraph 5, which includes the limitation of detection results from the antenna. If this is a correct interpretation of the claim, it should be amended thereto.

Regarding claim 9, the phrase "I e.," renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

The claims are generally narrative and indefinite, failing to conform to current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. They should be rewritten in order for the examiner to better understand the scope of the invention as claimed.

Claim Objections

Claims 1-13 are objected to because of the following informalities: Regarding claim 1, paragraph 5 as noted above, the phrase after the word "switch" is confusing and should be reworded. Regarding claim 2, paragraph 3 "detecting information whether or not" should read "detecting whether or not" as the subject of the sentence is implied. Regarding claim 4, lines 6 and 14 "prohibit" should be "prohibited" and "wherein on the other hand" should be removed, and in claims 4 and 7 "the state" in lines 4 and 12 (Claim 4) and lines 6 and 7 (Claim 7) lack antecedent basis. Furthermore, claims 4 and 9 appear to only be directed to the intended use of the system and do not set forth further structural limitations. Regarding claim 5 lines 5 and 7, "shield room" should be "shielded room". Regarding claim 6, lines 3-14 and the recitation of an energy transmission cable appear to be redundant in view of claim 1. Regarding claims 6, 10, and 11, "the energy-emission treatment apparatus" lacks antecedent basis. Regarding

claim 10, line 2, "includes" should be "comprises", and line 6 "at least" should be removed. Regarding claim 11, "for being connected to the treatment power supply unit" is confusing and the inclusion of the purpose of the cable at that spot makes the claim hard-to-read. Additionally, "at least" from line 6 should be removed. Regarding claim 13, the limitation "the correction unit" in lines 5 and 6 lacks antecedent basis and the claim appears to only be directed to intended use of the system and does not set forth further structural limitations.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi et al (US 6,059,718) in view of Hareyama et al (US 6,381,483 B1). Taniguchi et al disclose a therapy device coupled to an imager which provides therapy to a patient based on signals from an antenna (Col 64 Line 25-Col 65 Line 19, Col 78 Line 5-27) and a power supply (Col 65 Line 24-38), detection units for detecting electromagnetic waves (Col 73 Line 35-Col 74 Line 58), a control unit to control treatment (Col 90 Line 25-Col 91 Line 30), a filter for selective frequency passing (Col 80 Line 55- Col 81 Line 40), the use of a shielded room for therapy (Fig 16 and Col 22 Line 15-44), and cabling for transmission of signals to and from the device and power supply units (Col 93 Line

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10-61). The device additionally includes contacts for coupling to energy transmission cabling, switches for alternating states of the contacts (Col 123 Line 60-Col 126 Line 55).

Regarding claim 1, Taniguchi et al do not disclose the use of an energy-emission therapy instrument in conjunction with the device. Attention is directed to the secondary reference by Hareyama et al which discloses an energy-emission device which outputs treatment energy based on power signals received from a transmission cable (Col 1 Line 30-60). Additionally, Hareyama discloses the use of an antenna for receiving MR diagnostic images (Col 11 Line 50- Col 12 Line 23).

Regarding claims 2 and 3, Taniguchi et al do not disclose the use of signal detection along with control of therapy based on MR signals received. Hareyama et al disclose the use of a signal detection unit for receiving electromagnetic waves from a diagnostic MR system including a pass-filter (Col 22 Line 24-55) for allowing selective wavelengths to pass (Col 7 Line 40- Col 8 Line 54).

Regarding claim 4, Taniguchi et al do not disclose a therapeutic-energy-based control system, or a switching and control system based on electromagnetic waves detected. Hareyama et al disclose a switching unit for controlling the level of treatment energy desired (Col 8 Line 35-Col 9 Line 24) and a filter for allowing specific signals to pass (Fig 42, Col 20 Line 45- Col 21 Line 15).

Regarding claims 5 and 6, Taniguchi et al do not disclose the use of a shielded room with power supply positioned outside. Hareyama et al disclose a shielded room and the placement of a power supply outside of that room (Fig 35 and Col 22 Line 3-

46), control signaling mechanisms for controlling the level of power supplied to the therapy unit (Col 34 Line 5-45), as well as a signal line in conjunction with the power and control systems for transmission of signals (Fig 43-47 and Col 23-26).

Regarding claims 8-9, Taniguchi et al do not disclose the use of a relay unit which bases control on electromagnetic signals received from a diagnostic imager. Harayama et al disclose the use of a relay unit for switching the level of therapy in conjunction with signals received (Col 13 Line 25-Col 17 Line 20, Col 24 Line 25- Col 25 Line 4), a distance calculating unit for setting the distance and adjusting the therapy unit based on distances measured or desired (Col 19 Line 30- Col 20 Line 11),

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the control/therapy means of Hareyama et al with the device of Taniguchi et al for the purpose of effecting energy-emission therapy with imaging controls to ensure accuracy of the therapy.

Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguich et al in view of Hareyama et al as applied to claim 1 above, and further in view of Pearson et al (US 2003/0130711 A1). See figure 28 of Hareyama et al for the disclosure and use of a distance determining unit. Taniguchi et al in view of Hareyama et al does not disclose the use of a distance selection and adjustment or correction for power/distance based on the distance determined. Attention is directed to the secondary reference by Pearson et al which discloses the use of a distance measurement unit for adjusting power based on line resistance (0146-0152, Claims 1-4) to control the delivery of therapy to the target site. It would have been obvious to one of

ordinary skill in the art at the time of the invention to have included an impedance-driven control system for optimizing the power delivered to the treatment apparatus in order to assure that sufficient power is available to complete the therapy.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure includes Patent 7,048,716 which is also directed to a similar endoscope-based treatment system in conjunction with an MRI system and is of particular relevance to the claims of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOEL M. LAMPRECHT whose telephone number is (571)272-3250. The examiner can normally be reached on Monday-Friday 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571)272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ruth S. Smith/
Primary Examiner, Art Unit 3737

JML